

**CENTER FOR DRUG  
EVALUATION AND RESEARCH**

**Approval Package for:**

**APPLICATION NUMBER:**

**76-117**

***Generic Name:*** Ibuprofen Tablets USP, 200 mg

***Sponsor:*** Reddy-Cheminor, Inc.

***Approval Date:*** November 20, 2001

# **CENTER FOR DRUG EVALUATION AND RESEARCH**

**APPLICATION NUMBER:**  
**76-117**

## **CONTENTS**

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### **Reviews / Information Included in this ANDA Review.**

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Approval Letter	X
Tentative Approval Letter	
ANDAs	
Approvable Letter	
Final Printed Labeling	X
Medical Review(s)	
Chemistry Review(s)	X
EA/FONSI	
Pharmacology Review(s)	
Statistical Review(s)	
Microbiology Review(s)	
Clinical Pharmacology & Biopharmaceutics Reviews	
Bioequivalence Review(s)	X
Administrative Document(s)	X
Correspondence	X

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**CENTER FOR DRUG  
EVALUATION AND RESEARCH**

**APPLICATION NUMBER:**

76-117

**APPROVAL LETTER**

NOV 20 2001

Reddy-Cheminor, Inc.  
Attention: Paul V. Campanelli  
U.S. Agent for: Dr. Reddy's Laboratories Limited  
One Park Way  
Upper Saddle River, NJ 07458

Dear Sir:

This is in reference to your abbreviated new drug application dated February 14, 2001, submitted pursuant to Section 505(j) of the Federal Food, Drug, and Cosmetic Act (Act), for Ibuprofen Tablets USP, 200 mg (OTC).

Reference is also made to your amendments dated May 11, August 16, and October 1, 2001.

We have completed the review of this abbreviated application and have concluded that the drug is safe and effective for over-the-counter (OTC) use as recommended in the submitted labeling. Accordingly the application is approved. The Division of Bioequivalence has determined your Ibuprofen Tablets USP, 200 mg to be bioequivalent to the listed drug (Nuprin<sup>®</sup> Tablets, 200 mg, of McNeil Consumer Products Company, Division of McNeilab Inc.). Your dissolution testing should be incorporated into the stability and quality control program using the same method proposed in your application.

Under Section 506A of the Act, certain changes in the conditions described in this abbreviated application require an approved supplemental application before the change may be made.

Post-marketing reporting requirements for this abbreviated application are set forth in 21 CFR 314.80-81 and 314.98. The Office of Generic Drugs should be advised of any change in the marketing status of this drug.

Sincerely yours,

7 . | S | -

Gary Buehler  
Director

11/20/01

Office of Generic Drugs  
Center for Drug Evaluation and Research

**CENTER FOR DRUG  
EVALUATION AND  
RESEARCH**

**APPLICATION NUMBER:**

76-117

Final Printed Labeling

# Carton Label: 500's Count

LOT:  
EXP:

## Drug Facts (continued)

**Stop use and ask a doctor if**

- an allergic reaction occurs. Seek medical help right away.
- pain gets worse or lasts more than 10 days.
- fever gets worse or lasts more than 3 days.
- stomach pain or upset gets worse or lasts.
- redness or swelling is present in the painful area.
- any new symptoms appear.

**If pregnant or breast-feeding**, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery.

**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • **do not take more than directed**

adults and children 12 years and older:

- take 1 tablet every 4 to 6 hours while symptoms persist.
- if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor.
- the smallest effective dose should be used.

children under 12 years: • ask a doctor

**Other Information**

- bottle sealed with printed foil under cap. Do not use if foil is open or torn.
- store at 20 - 25°C (68 - 77°F).
- avoid high humidity and excessive heat above 40°C (104°F).
- see end panel for lot number and expiration date

**Inactive Ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl methylcellulose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polysorbate, sodium citrate, sodium starch glycolate, synthetic red iron oxide, titanium dioxide, triacetin.

# Ibuprofen Tablets USP, 200 mg

Pain Reliever/  
Fever Reducer

THIS PACKAGE FOR HOUSEHOLDS  
WITHOUT YOUNG CHILDREN

# Ibuprofen Tablets USP, 200 mg

Pain Reliever/  
Fever Reducer

THIS PACKAGE FOR HOUSEHOLDS  
WITHOUT YOUNG CHILDREN

DR. REDDY'S

DR. REDDY'S

Ibuprofen Tablets USP,  
200 mg

Manufactured by:  
Dr. Reddy's Laboratories Limited  
Bachepalli - 502 325, INDIA

## Drug Facts

**Active ingredient (in each tablet)** **Purposes**

Ibuprofen USP, 200 mg.....Pain reliever/fever reducer

**Uses** temporarily relieves minor aches and pains due to:

- headache
- muscular aches
- minor pain of arthritis
- toothache
- backache
- the common cold
- menstrual cramps
- reduces fever

**Warnings**

**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:

- hives
- asthma (wheezing)
- facial swelling
- shock

**Alcohol warning:** If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding.

**Do not use** if you have ever had an allergic reaction to any other pain reliever/fever reducer.

**Ask a doctor before use if you have**

- stomach pain
- problems or serious side effects from taking pain relievers or fever reducers.

**Ask a doctor or pharmacist before use if you are**

- under a doctor's care for any serious condition
- taking any other drug
- taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

**When using this product** take with food or milk if stomach upset occurs.

NOV 20 2001

75% of  
the actual  
size


000134





# Carton Label: 200's Count

LOT :  
EXP :



DR. REDDY'S

## Ibuprofen Tablets USP, 200 mg

Pain Reliever/  
Fever Reducer

THIS PACKAGE FOR HOUSEHOLDS  
WITHOUT YOUNG CHILDREN

DR. REDDY'S

## Ibuprofen Tablets USP, 200 mg

Pain Reliever/  
Fever Reducer

THIS PACKAGE FOR HOUSEHOLDS  
WITHOUT YOUNG CHILDREN

**Drug Facts (continued)**

**Stop use and ask a doctor if**

- an allergic reaction occurs. Seek medical help right away.
- pain gets worse or lasts more than 10 days.
- fever gets worse or lasts more than 3 days.
- stomach pain or upset gets worse or lasts.
- redness or swelling is present in the painful area.
- any new symptoms appear.

**If pregnant or breast-feeding**, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery.

**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed

adults and children 12 years and older:

- take 1 tablet every 4 to 6 hours while symptoms persist.
- if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor.
- the smallest effective dose should be used.

children under 12 years: • ask a doctor

**Other Information**

- bottle sealed with printed foil under cap. Do not use if foil is open or torn.
- store at 20° - 25°C (68° - 77°F); avoid high humidity and excessive heat above 40°C (104°F).
- see end panel for lot number and expiration date.

**Inactive ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl methylcellulose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polysorbate, sodium citrate, sodium starch glycolate, synthetic red iron oxide, titanium dioxide, triacetin.

**Drug Facts**

**Active ingredient (in each tablet)**

ibuprofen USP, 200 mg.....Pain reliever/fever reducer

**Uses** temporarily relieves minor aches and pains due to:

- headache
- muscular aches
- minor pain of arthritis
- toothache
- backache
- menstrual cramps
- reduces fever

**Warnings**

**Allergy alert:** ibuprofen may cause a severe allergic reaction which may include:

- hives
- asthma (wheezing)
- facial swelling
- shock

**Alcohol warning:** if you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding.

**Do not use** if you have ever had an allergic reaction to any other pain reliever/fever reducer.

**Ask a doctor before use if you have**

- stomach pain
- problems or serious side effects from taking pain relievers or fever reducers.

**Ask a doctor or pharmacist before use if you are**

- under a doctor's care for any serious condition
- taking any other drug
- taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

**When using this product** take with food or milk if stomach upset occurs.

APPROVED

NOV 20 2001

**Drug Facts (continued)**

**Stop use and ask a doctor if**

- an allergic reaction occurs. Seek medical help right away.
- pain gets worse or lasts more than 10 days.
- fever gets worse or lasts more than 3 days.
- stomach pain or upset gets worse or lasts.
- redness or swelling is present in the painful area.
- any new symptoms appear.

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**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

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**Other Information**

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- store at 20° - 25°C (68° - 77°F); avoid high humidity and excessive heat above 40°C (104°F).
- see end panel for lot number and expiration date.

**Inactive ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl methylcellulose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polysorbate, sodium citrate, sodium starch glycolate, synthetic red iron oxide, titanium dioxide, triacetin.

**Drug Facts**

**Active ingredient (in each tablet)**

ibuprofen USP, 200 mg.....Pain reliever/fever reducer

**Uses** temporarily relieves minor aches and pains due to:

- headache
- muscular aches
- minor pain of arthritis
- toothache
- backache
- menstrual cramps
- reduces fever

**Warnings**

**Allergy alert:** ibuprofen may cause a severe allergic reaction which may include:

- hives
- asthma (wheezing)
- facial swelling
- shock

**Alcohol warning:** if you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding.

**Do not use** if you have ever had an allergic reaction to any other pain reliever/fever reducer.

**Ask a doctor before use if you have**

- stomach pain
- problems or serious side effects from taking pain relievers or fever reducers.

**Ask a doctor or pharmacist before use if you are**

- under a doctor's care for any serious condition
- taking any other drug
- taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

**When using this product** take with food or milk if stomach upset occurs.

APPROVED

NOV 20 2001

**Drug Facts (continued)**

**Stop use and ask a doctor if**

- an allergic reaction occurs. Seek medical help right away.
- pain gets worse or lasts more than 10 days.
- fever gets worse or lasts more than 3 days.
- stomach pain or upset gets worse or lasts.
- redness or swelling is present in the painful area.
- any new symptoms appear.

**If pregnant or breast-feeding**, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery.

**Keep out of reach of children.** In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed

adults and children 12 years and older:

- take 1 tablet every 4 to 6 hours while symptoms persist.
- if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor.
- the smallest effective dose should be used.

children under 12 years: • ask a doctor

**Other Information**

- bottle sealed with printed foil under cap. Do not use if foil is open or torn.
- store at 20° - 25°C (68° - 77°F); avoid high humidity and excessive heat above 40°C (104°F).
- see end panel for lot number and expiration date.

**Inactive ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl methylcellulose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polysorbate, sodium citrate, sodium starch glycolate, synthetic red iron oxide, titanium dioxide, triacetin.

**Drug Facts**

**Active ingredient (in each tablet)**

ibuprofen USP, 200 mg.....Pain reliever/fever reducer

**Uses** temporarily relieves minor aches and pains due to:

- headache
- muscular aches
- minor pain of arthritis
- toothache
- backache
- menstrual cramps
- reduces fever

**Warnings**

**Allergy alert:** ibuprofen may cause a severe allergic reaction which may include:

- hives
- asthma (wheezing)
- facial swelling
- shock

**Alcohol warning:** if you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding.

**Do not use** if you have ever had an allergic reaction to any other pain reliever/fever reducer.

**Ask a doctor before use if you have**

- stomach pain
- problems or serious side effects from taking pain relievers or fever reducers.

**Ask a doctor or pharmacist before use if you are**

- under a doctor's care for any serious condition
- taking any other drug
- taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

**When using this product** take with food or milk if stomach upset occurs.

APPROVED

NOV 20 2001

90% of the  
actual size

000110

## Carton Label: 150's Count

## Drug Facts

Active ingredient (in each tablet)	Purposes
Ibuprofen USP, 200 mg	Pain reliever/fever reducer

**Uses** temporarily relieves minor aches and pains due to:

- headache
- toothache
- muscular aches
- backache
- minor pain of arthritis
- the common cold

- menstrual cramps
- reduces fever

## **Warnings**

**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:

- hives
- asthma (wheezing)
- facial swelling
- shock

**Alcohol warning:** If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding.

**Do not use it if you have ever had an allergic reaction to any other pain reliever/fever reducer.**

**ask a doctor before use if you have**

**stomach pain**  
**problems or serious side effects from taking**  
**pain relievers or fever reducers.**

**Ask a doctor or pharmacist before use if you are**

- under a doctor's care for any serious condition
- taking any other drug

- taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

**When using this product take with food or milk if stomach upset occurs.**

APPROVED

NOV 20 2006

DR. REDDY'S

# Ibuprofen

## Tablets USP, 200 mg

### Pain Reliever/ Fever Reducer

**THIS PACKAGE FOR HOUSEHOLDS WITHOUT YOUNG CHILDREN**

DR. REDDY'S

# Ibuprofen

## Tablets USP, 200 mg

## Pain Reliever/ Fever Reducer

**THIS PACKAGE FOR HOUSEHOLDS WITHOUT YOUNG CHILDREN**

**Ibuprofen Tablets USP,  
200 mg**

**Manufactured by:**  
**Dr. Reddy's Laboratories Limited**  
**Bachepalli - 502 325, INDIA**

**Drug Facts (continued)**

**Stop use and ask a doctor if**

- an allergic reaction occurs. Seek medical help right away.
- pain gets worse or lasts more than 10 days.
- fever gets worse or lasts more than 3 days.
- stomach pain or upset gets worse or lasts more than 3 days.
- redness or swelling is present in the painful area or lasts more than 3 days.
- any new symptoms appear.

**If pregnant or breast-feeding,** ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery.

**Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.**

**Directions** , do not take more than directed

Adults and children 12 years and older:

**• take 1 tablet every 4 to 6 hours while symptoms persist**

... if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours unless directed

by a doctor. the smallest effective dose should be used

children under 12 years: ask a doctor

**Other Information**

• bottle sealed with printed foil under cap. Do not use if foil is

open or torn • store at 20 - 25°C (68 - 77°F) • avoid high humidity

and excessive heat above 40°C (104°F).  
see end panel for lot number and expiration date

**Inactive ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl

methylcellulose, lactose, magnesium stearate, microcrystalline

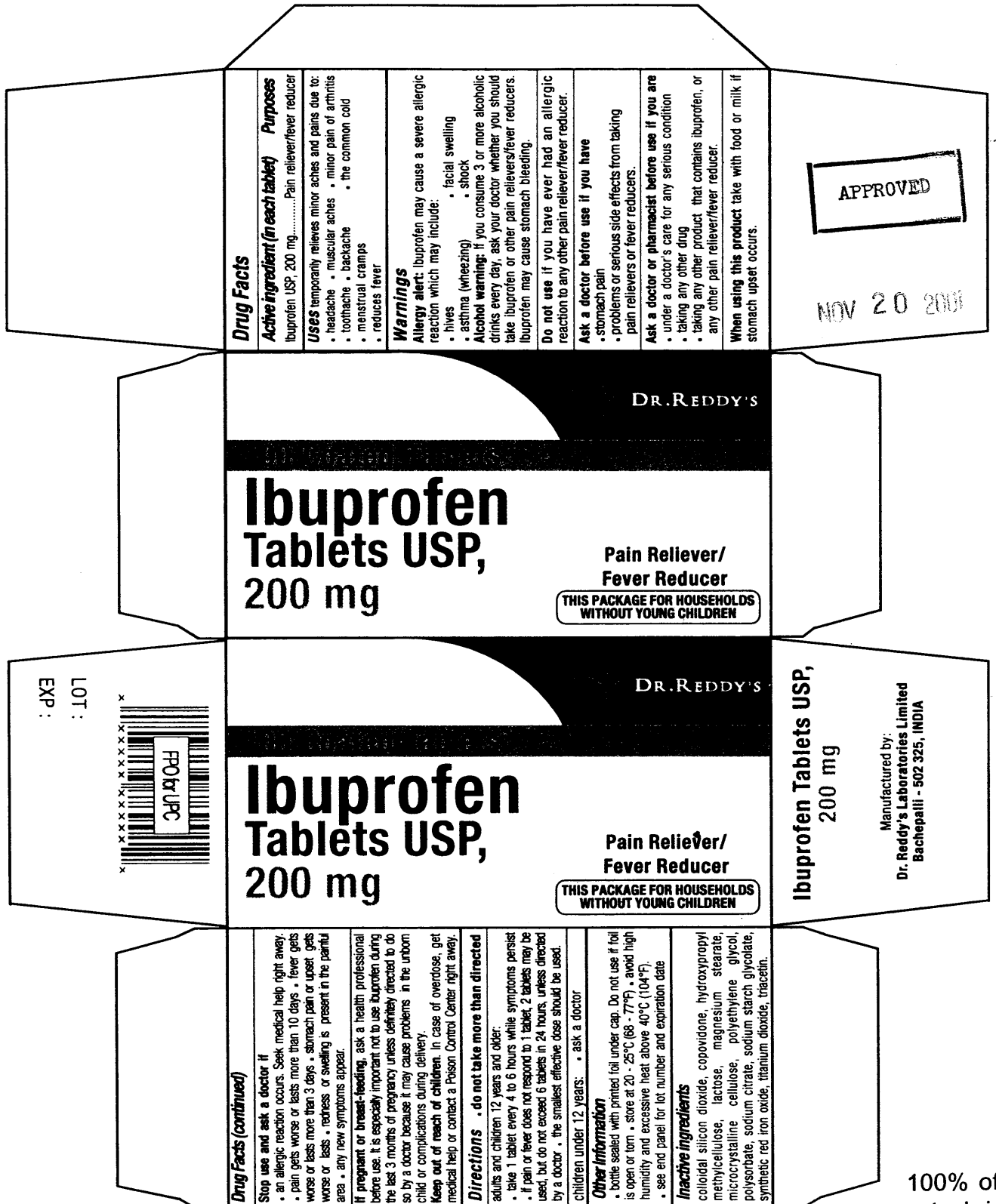
sodium starch glycolate synthetic red iron oxide titanium dioxide, polyethylene glycol, polysorbate, sodium citrate, cellulose.

dioxide, triacetin.

90% of the  
actual size

000099

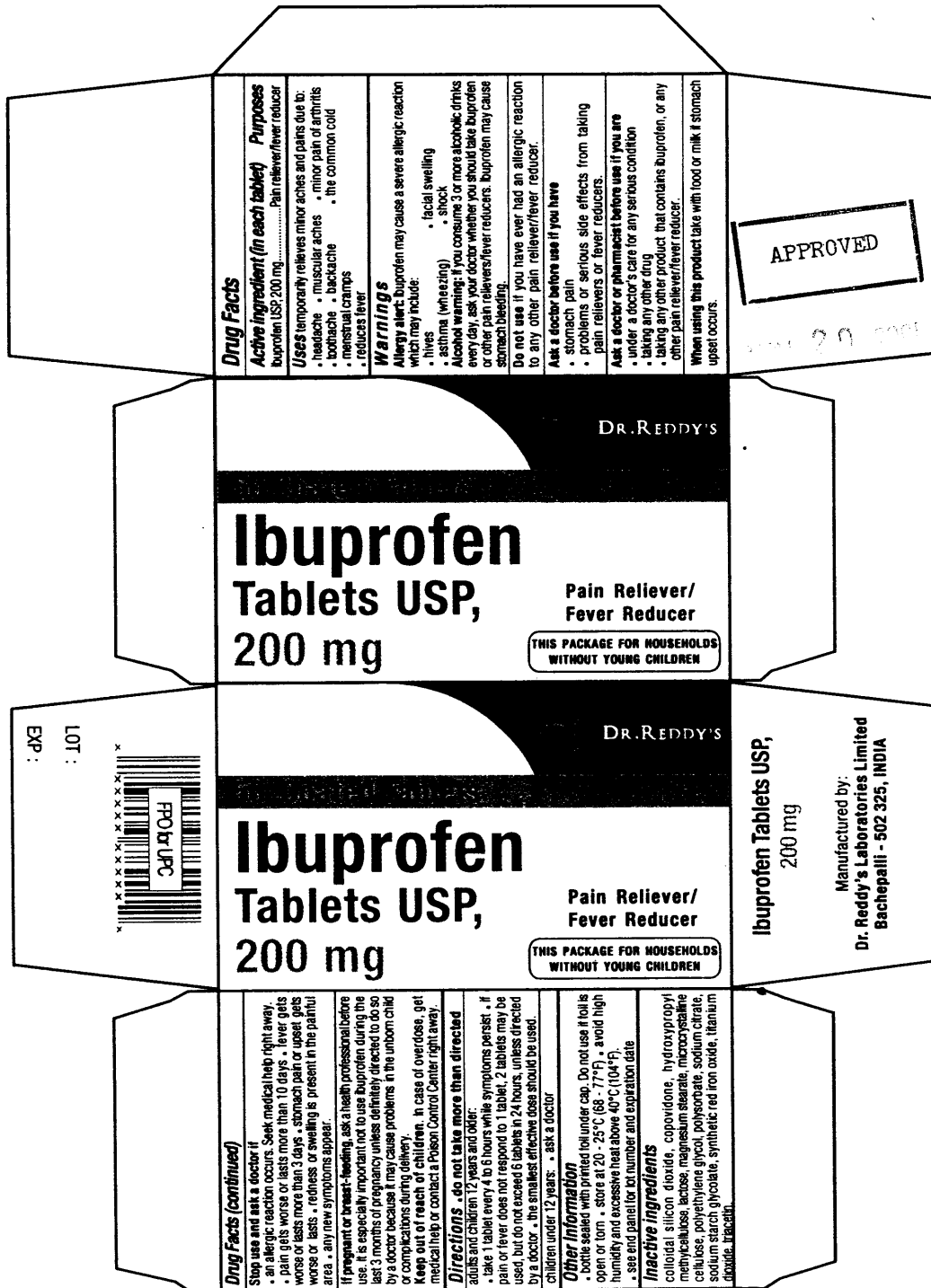
# Carton Label: 100's Count



100% of the actual size

000086

# Carton Label: 50's Count



100% of the actual size

000074

# Carton Label: 24's Count



100% of the actual size

000065

## Container Label: 500's Count

<p>Bottle sealed with printed foil under cap. Do not use if foil is open or torn.</p> <p><b>Drug Facts</b>  <b>Active ingredient (in each tablet)</b>          Ibuprofen USP, 200 mg.....Pain reliever / fever reducer  <b>Purposes</b>  <b>Uses</b> temporarily relieves minor aches and pains due to:          • headache • muscular aches • minor pain of arthritis          • toothache • backache • the common cold • menstrual cramps          • reduces fever  <b>Warnings</b>  <b>Allergy alert:</b> Ibuprofen may cause a severe allergic reaction which may include:          • hives • facial swelling • asthma (wheezing) • shock  <b>Alcohol warning:</b> If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding. Do not use if you have ever had an allergic reaction to any other pain reliever/fever reducer. Ask a doctor before use if you have • stomach pain • problems or serious side effects from taking pain relievers or fever reducers. Ask a doctor or pharmacist before use if you are • under a doctor's care for any serious condition • taking any other drug • taking any other</p>	<p>DR. REDDY'S</p> <p><b>Ibuprofen</b>  <b>Tablets USP, 200 mg</b>  <b>Pain Reliever/Fever Reducer</b></p> <p><b>Drug Facts (continued)</b>          product that contains ibuprofen, or any other pain reliever/fever reducer. When using this product take with food or milk if stomach upset occurs. Stop use and ask a doctor if          • an allergic reaction occurs. Seek medical help right away • pain gets worse or lasts more than 10 days • fever gets worse or lasts more than 3 days • stomach pain or upset gets worse or lasts • redness or swelling is present in the painful area ▶</p>	<p><b>Drug Facts (continued)</b>          • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.  <b>Directions</b> • do not take more than directed          Adults and children 12 years and older:          • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used. Children under 12 years: ask a doctor          • store at 20 - 25°C (68 - 77°F)          • avoid high humidity and excessive heat above 40°C (104°F).</p>	<p>Mfg. by: Dr. Reddy's Laboratories Limited          Bachepalli - 502 325, INDIA</p> <p>Lot :          Exp : NOV 20 2009</p>
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<p>Bottle sealed with printed foil under cap. Do not use if foil is open or torn.</p> <p><b>Drug Facts</b>  <b>Active ingredient (in each tablet)</b>          Ibuprofen USP, 200 mg.....Pain reliever / fever reducer  <b>Purposes</b>  <b>Uses</b> temporarily relieves minor aches and pains due to:          • headache • muscular aches • minor pain of arthritis          • toothache • backache • the common cold • menstrual cramps          • reduces fever  <b>Warnings</b>  <b>Allergy alert:</b> Ibuprofen may cause a severe allergic reaction which may include:          • hives • facial swelling • asthma (wheezing) • shock  <b>Alcohol warning:</b> If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding. Do not use if you have ever had an allergic reaction to any other pain reliever/fever reducer. Ask a doctor before use if you have • stomach pain • problems or serious side effects from taking pain relievers or fever reducers. Ask a doctor or pharmacist before use if you are • under a doctor's care for any serious condition • taking any other drug • taking any other</p>	<p>DR. REDDY'S</p> <p><b>Ibuprofen</b>  <b>Tablets USP, 200 mg</b>  <b>Pain Reliever/Fever Reducer</b></p> <p><b>Drug Facts (continued)</b>          product that contains ibuprofen, or any other pain reliever/fever reducer. When using this product take with food or milk if stomach upset occurs. Stop use and ask a doctor if          • an allergic reaction occurs. Seek medical help right away • pain gets worse or lasts more than 10 days • fever gets worse or lasts more than 3 days • stomach pain or upset gets worse or lasts • redness or swelling is present in the painful area ▶</p>	<p><b>Drug Facts (continued)</b>          • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.  <b>Directions</b> • do not take more than directed          Adults and children 12 years and older:          • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used. Children under 12 years: ask a doctor          • store at 20 - 25°C (68 - 77°F)          • avoid high humidity and excessive heat above 40°C (104°F).</p>	<p>Mfg. by: Dr. Reddy's Laboratories Limited          Bachepalli - 502 325, INDIA</p> <p>Lot :          Exp : NOV 20 2009</p>
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000054

76-117

AP

11/20/01

Bottle sealed with printed foil under cap. Do not use if foil is open or torn.

**Drug Facts**  
**Active ingredient (in each tablet)**  
 Ibuprofen USP, 200 mg

**Purposes**  
 Uses temporarily relieves minor aches and pains due to:  
 • headache • muscular aches • minor pain of arthritis • toothache • backache • the common cold • menstrual cramps • reduces fever

**Warnings**  
**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:  
 • hives • facial swelling • asthma (wheezing) • shock

**Alcohol warning:** If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding. Do not use if you have ever had an allergic reaction to any other pain reliever/fever reducer. Ask a doctor before use if you have • stomach pain • problems or serious side effects from taking pain relievers or fever reducers. Ask a doctor or pharmacist before use if you are • under a doctor's care for any serious condition • taking any other drug • taking any other product that

DR. REDDY'S

## Ibuprofen

Tablets USP, 200 mg

Pain Reliever/Fever Reducer

**Drug Facts (continued)**  
 is present in the painful area • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed Adults and children 12 years and older: • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used. Children under 12 years: ask a doctor  
 • store at 20 - 25°C (68 - 77°F)  
 • avoid high humidity and excessive heat above 40°C (104°F).

Mfg. by: Dr. Reddy's Laboratories Limited  
 Bachepalli - 502 325, INDIA

Lot : NOV 20  
 Exp :

Bottle sealed with printed foil under cap. Do not use if foil is open or torn.

**Drug Facts**  
**Active ingredient (in each tablet)**  
 Ibuprofen USP, 200 mg

**Purposes**  
 Uses temporarily relieves minor aches and pains due to:  
 • headache • muscular aches • minor pain of arthritis • toothache • backache • the common cold • menstrual cramps • reduces fever

**Warnings**  
**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:  
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DR. REDDY'S

## Ibuprofen

Tablets USP, 200 mg

Pain Reliever/Fever Reducer

**Drug Facts (continued)**  
 is present in the painful area • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

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 • store at 20 - 25°C (68 - 77°F)  
 • avoid high humidity and excessive heat above 40°C (104°F).

Mfg. by: Dr. Reddy's Laboratories Limited  
 Bachepalli - 502 325, INDIA

Lot : NOV 20 2001  
 Exp :

Bottle sealed with printed foil under cap. Do not use if foil is open or torn.

**Drug Facts**  
**Active ingredient (in each tablet)**  
 Ibuprofen USP, 200 mg

**Purposes**  
 Uses temporarily relieves minor aches and pains due to:  
 • headache • muscular aches • minor pain of arthritis • toothache • backache • the common cold • menstrual cramps • reduces fever

**Warnings**  
**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:  
 • hives • facial swelling • asthma (wheezing) • shock

**Alcohol warning:** If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding. Do not use if you have ever had an allergic reaction to any other pain reliever/fever reducer. Ask a doctor before use if you have • stomach pain • problems or serious side effects from taking pain relievers or fever reducers. Ask a doctor or pharmacist before use if you are • under a doctor's care for any serious condition • taking any other drug • taking any other product •

DR. REDDY'S

## Ibuprofen

Tablets USP, 200 mg

Pain Reliever/Fever Reducer

**Drug Facts (continued)**  
 • redness or swelling is present in the painful area • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed Adults and children 12 years and older: • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used. Children under 12 years: ask a doctor  
 • store at 20 - 25°C (68 - 77°F)  
 • avoid high humidity and excessive heat above 40°C (104°F).

Mfg. by: Dr. Reddy's Laboratories Limited  
 Bachepalli - 502 325, INDIA

Lot : NOV 20 2001  
 Exp :

Bottle sealed with printed foil under cap. Do not use if foil is open or torn.

**Drug Facts**  
**Active ingredient (in each tablet)**  
 Ibuprofen USP, 200 mg

**Purposes**  
 Uses temporarily relieves minor aches and pains due to:  
 • headache • muscular aches • minor pain of arthritis • toothache • backache • the common cold • menstrual cramps • reduces fever

**Warnings**  
**Allergy alert:** Ibuprofen may cause a severe allergic reaction which may include:  
 • hives • facial swelling • asthma (wheezing) • shock

**Alcohol warning:** If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take ibuprofen or other pain relievers/fever reducers. Ibuprofen may cause stomach bleeding. Do not use if you have ever had an allergic reaction to any other pain reliever/fever reducer. Ask a doctor before use if you have • stomach pain • problems or serious side effects from taking pain relievers or fever reducers. Ask a doctor or pharmacist before use if you are • under a doctor's care for any serious condition • taking any other drug • taking any other product •

DR. REDDY'S

## Ibuprofen

Tablets USP, 200 mg

Pain Reliever/Fever Reducer

**Drug Facts (continued)**  
 • any new symptoms appear. If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed Adults and children 12 years and older: • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used. Children under 12 years: ask a doctor  
 • store at 20 - 25°C (68 - 77°F)  
 • avoid high humidity and excessive heat above 40°C (104°F).

Mfg. by: Dr. Reddy's Laboratories Limited  
 Bachepalli - 502 325, INDIA

Lot : NOV 20 2001  
 Exp :

CONSUMER LABELING LEAFLET FOR IBUPROFEN TABLETS USP, 200 mg

PLEASE SAVE THIS FOR FUTURE USE.

Only selected information is contained on the bottle label.  
Therefore, you should keep this sheet for future reference.

APPROVED

NOV 20 2000

# IBUPROFEN

Tablets USP, 200 mg

Pain Reliever / Fever Reducer

## **Drug Facts**

### **Active Ingredient (in each tablet)**

Ibuprofen USP, 200 mg

### **Purposes**

Pain reliever / fever reducer

### **Uses**

temporarily relieves minor aches

and pains due to: • headache

• muscular aches • minor pain of

arthritis • toothache • backache • the

common cold • menstrual cramps

• reduces fever

### **Warnings**

**Allergy alert:** Ibuprofen may cause a

severe allergic reaction which may

include: • hives • facial swelling

• asthma (wheezing) • shock

**Alcohol warning:** If you consume 3

or more alcoholic drinks every day, ask

your doctor whether you should take

ibuprofen or other pain relievers/fever

reducers. Ibuprofen may cause

stomach bleeding.

**Do not use** if you have ever had an

allergic reaction to any other pain reliever/

fever reducer.

**Ask a doctor before use** if you

have • stomach pain • problems or

serious side effects from taking pain

relievers or fever reducers.

**Ask a doctor or pharmacist before**

**use** if you are • under a doctor's care

(continued)



**Drug Facts (continued)**

for any serious condition • taking any other drug • taking any other product that contains ibuprofen, or any other pain reliever/fever reducer.

When using this product take with food or milk if stomach upset occurs.

Stop use and ask a doctor if • an allergic reaction occurs. Seek medical help right away • pain gets worse or lasts more than 10 days • fever gets worse or lasts more than 3 days • stomach pain or upset gets worse or lasts • redness or swelling is present in the painful area • any new symptoms appear.

If pregnant or breast-feeding, ask a health professional before use. It is especially important not to use ibuprofen during the last 3 months of pregnancy unless definitely directed to do so by a doctor because it may cause problems in the unborn child or complications during delivery.

Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

**Directions** • do not take more than directed.

Adults and children 12 years and older: • take 1 tablet every 4 to 6 hours while symptoms persist • if pain or fever does not respond to 1 tablet, 2 tablets may be used, but do not exceed 6 tablets in 24 hours, unless directed by a doctor • the smallest effective dose should be used.

Children under 12 years: • ask a doctor.

**Other Information**

• bottle sealed with printed foil under cap. Do not use if foil is open or torn • store at 20 - 25°C (68 - 77°F) • avoid high humidity and excessive heat above 40°C (104°F).

**Inactive Ingredients**

colloidal silicon dioxide, copovidone, hydroxypropyl methylcellulose, lactose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polysorbate, sodium citrate, sodium starch glycolate, synthetic red iron oxide, titanium dioxide, triacetin.

Manufactured by

Dr. Reddy's Laboratories Limited  
Bachepalli - 502 325, INDIA.

**CENTER FOR DRUG  
EVALUATION AND RESEARCH**

**APPLICATION NUMBER:**

76-117

**CHEMISTRY REVIEW(S)**

Office of Generic Drugs  
Center of Drug Evaluation and Research  
Supplemental Application  
Chemistry, Manufacturing and Controls Review

---

1. CHEMIST'S REVIEW NO.1

2. ANDA 76-117

3. NAME AND ADDRESS OF APPLICANT  
Dr. Reddy's Laboratories Limited  
Contact: Pravir Choubey  
Bachepalli  
Post Bag No. 15  
Kukatpally P.O.  
Hyderabad  
500 072 INDIA  
Phone: 91 40 304 5206  
FAX: 91 40 304 5238

U.S. Agent:

Dr. Reddy's Laboratories, Inc., U.S. Agent  
Attn: C. Jeanne Taborsky  
Senior Consultant  
One Park Way  
Upper Saddle River, NJ 07458  
Phone: 410-309-3145  
Fax: 410-309-6145

And

Dr. Reddy's Laboratories, Inc.  
Attn: Mr. Paul Campanelli  
Vice President Formulations Business  
One Park Way  
Upper Saddle River, NJ 07458  
Phone: 201-760-2880  
Fax: 201-760-0401

4. LEGAL BASIS FOR ANDA SUBMISSION Prior Approval Supplement

5. SUPPLEMENT(s) SCP-001

6. ESTABLISHED NAME  
Ibuprofen Tablets USP

7. PROPRIETARY NAME  
N/A

8. SUPPLEMENT(S) PROVIDE(S) FOR

Technical and stability data on tablets packaged in

9. AMENDMENTS AND OTHER DATES

Firm

Orig. Submission

25-JAN-2002

10. (PROPOSED) INDICATION(S) FOR USE NSAID

11. Rx or OTC

OTC

12. RELATED IND/NDA/DMF(S) N/A

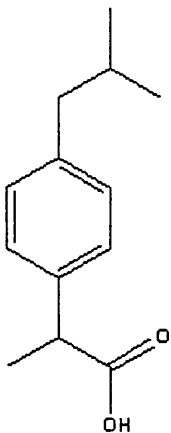
13. DOSAGE FORM

Tablets (Oral)

14. STRENGTH(S)

200 mg

15. CHEMICAL NAME AND STRUCTURE



16. RECORDS AND REPORTS None

17. COMMENTS See bolded items throughout the deficiency

**Redacted** 6

**pages of trade secret and/or**

**confidential**

**commercial**

**information**

Office of Generic Drugs  
Center of Drug Evaluation and Research  
ABBREVIATED NEW DRUG APPLICATION  
Chemistry, Manufacturing and Controls Review

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1. CHEMISTS REVIEW NO.2

2. ANDA 76-117

3. NAME AND ADDRESS OF APPLICANT  
Dr. Reddy's Laboratories Limited  
Contact: Pravir Choubey  
Bachepalli  
Post Bag No. 15  
Kukatpally P.O.  
Hyderabad  
500 072 INDIA  
Phone: 91 40 304 5206  
FAX: 91 40 304 5238

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Dr. Reddy's Laboratories, Inc., U.S. Agent  
Attn: C. Jeanne Taborsky  
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And

Dr. Reddy's Laboratories, Inc.  
Attn: Mr. Paul Campanelli  
Vice President Formulations Business  
One Park Way  
Upper Saddle River, NJ 07458  
Phone: 201-760-2880  
Fax: 201-760-0401

4. LEGAL BASIS FOR ANDA SUBMISSION  
Generic version of McNeil's, MOTRIN<sup>®</sup> (NDA 17-463). Patent  
certification and exclusivity statement are provided (page 10).

5. SUPPLEMENT(s) N/A

6. ESTABLISHED NAME

7. PROPRIETARY NAME

**Ibuprofen Tablets      USP**

**N/A**

8. SUPPLEMENT(s) PROVIDE(s) FOR Original ANDA

9. AMENDMENTS AND OTHER DATES

**Firm**

Orig. submission	2/14/01
Response to FAX Deficiency	8/16/01
US Agent Response	10/01/01

**FDA**

Acknowledgment letter	
FAX Deficiency	7/27/01

10. (PROPOSED) INDICATION(S) FOR USE

Anti-inflammatory -

Indicated for relief of the signs and symptoms of rheumatoid arthritis and osteoarthritis, for relief of mild to moderate pain and for the treatment of primary dysmenorrhea.

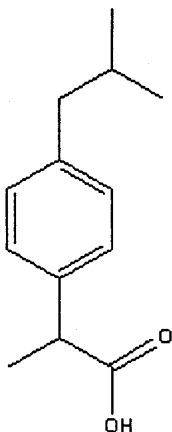
11. Rx or OTC  
OTC

12. RELATED IND/NDA/DMF(s)  
DMF # \_\_\_\_\_

13. DOSAGE FORM  
**Tablets** (Oral)

14. STRENGTH(S)  
**200 mg**

15. CHEMICAL NAME AND STRUCTURE



16. RECORDS AND REPORTS None

17. COMMENTS

- a. Application: Approvable
- b. Labeling: Acceptable 9/4/01
- c. Bio review: Acceptable 8/28/01
- c. Drug Master File — Adequate
- d. Methods validation (District): Not required
- d. Establishment evaluation: Acceptable 3/29/01

18. CONCLUSIONS AND RECOMMENDATIONS **Not Approvable**

19. REVIEWER:  
RFPowers

DATE COMPLETED:  
08/27/01 Revised: 10/23/01

**APPEARS THIS WAY  
ON ORIGINAL**



**Redacted**

16

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**confidential**

**commercial**

**information**

**CENTER FOR DRUG  
EVALUATION AND  
RESEARCH**

**APPLICATION NUMBER:**

**76-117**

**BIOEQUIVALENCE REVIEW**

RFP

1.1

**OFFICE OF GENERIC DRUGS  
DIVISION OF BIOEQUIVALENCE**

ANDA #: 76-117

SPONSOR : Dr. Reddy's Laboratories

DRUG AND DOSAGE FORM : Ibuprofen Tablets

STRENGTH(S) : 200 mg

TYPES OF STUDIES : Fasting and non-fasting

CLINICAL STUDY SITE(S) : \_\_\_\_\_

ANALYTICAL SITE(S) : \_\_\_\_\_

STUDY SUMMARY : The fasting and non-fasting studies are acceptable.

DISSOLUTION : The dissolution testing is acceptable. The firm has used USP 24 dissolution method and the test product meets USP specifications.

**DSI INSPECTION STATUS**

Inspection needed: NO	Inspection status:	Inspection results:
First Generic <u>No</u>	Inspection requested: (date)	
New facility _____	Inspection completed: (date)	
For cause _____		
Other _____		

PRIMARY REVIEWER : Kuldeep R. Dhariwal, Ph.D.

BRANCH : II

INITIAL : SIDATE : 8/27/01

TEAM LEADER :

S. Nerurkar, Ph. D.

BRANCH : II

INITIAL : SIDATE : 8/27/2001

DIRECTOR, DIVISION OF BIOEQUIVALENCE : DALE P. CONNER, Pharm. D.

INITIAL : SIDATE : 8/28/2001

<b>IBUPROFEN TABLETS, USP</b>	<b>Dr. Reddy's Laboratories Limited</b>
<b>200 mg</b>	<b>U.S. Agent: Reddy-Cheminor, Inc.</b>
<b>ANDA 76-117</b>	<b>66 South Maple Avenue, Ridgewood, NJ 07450</b>
<b>Reviewer: Kuldeep R. Dhariwal</b>	<b>Submission Dates: 2/14/01, 5/11/2001</b>
<b>V:\FIRMSAM\CHEMINOR\LTRS&amp;REV\76117SD.201</b>	


## **Review of Bioequivalence Studies and Dissolution Data**

### **Introduction**

**First Generic:** No

**Indication:** It is indicated for the temporary relief of headache, muscular aches, the minor pain of arthritis, toothache, backache, minor aches and pains associated with the common cold, the pain of menstrual cramps, and for reduction of fever.

**Type of Submission:** Paper submission

**Contents of Submission:** Fasting and food studies on 200 mg tablet. Dissolution data on 200 mg tablet. The firm also submitted waiver request for  tablet but later this strength was withdrawn.

**RLD:** Nuprin<sup>®</sup> (Bristol-Myers) 200 mg tablets (OTC product).

**Recommended Dose:**

Adults: 1 tablet or caplet every 4 to 6 hours while symptoms persist. If pain or fever does not respond to 1 tablet or caplet, 2 tablets or caplets may be used but not exceeding 6 tablets or caplets in 24 hours, unless directed by a doctor. The smallest effective dose should be used. Take with food or milk if occasional and mild heartburn, upset stomach, or stomach pain occurs with use.


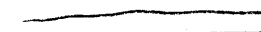
Children: Not recommended for children under 12 except under the advice and supervision of a doctor.

**Financial Disclosure:** The principal investigator has no conflict of interest with Reddy-Cheminor, Inc.

**Protocol No.:** AAI-US-82, An Open Label Randomized Pharmacokinetic Study to Determine the Bioequivalence of Oral Ibuprofen Formulations in Normal Healthy Male Volunteers.

### **Study Information**

#### **STUDY FACILITY INFORMATION**

<b>Clinical Facility:</b>	
<b>Principal Investigator:</b>	
<b>Clinical Study Dates:</b>	Period I 08/19/2000 Period II 08/26/2000

<b>Analytical Facility</b>	
<b>Analytical Director:</b>	
<b>Analytical Study Dates:</b>	9/07/00 to 10/05/00
<b>Storage Period:</b>	46 days

### TREATMENT INFORMATION

<b>Treatment ID:</b>	A	B
<b>Test or Reference:</b>	T	R
<b>Product Name:</b>	Ibuprofen tablets	Nuprin <sup>®</sup>
<b>Manufacturer:</b>	Cheminor Drug, Ltd	Bristol-Myers
<b>Manufacture Date:</b>	May 2000	N/A
<b>Expiration Date:</b>	N/A	11/2001
<b>ANDA Batch Size:</b>	— tablets	N/A
<b>Full Batch Size:</b>	— tablets	N/A
<b>Batch/Lot Number:</b>	H001	811536
<b>Potency:</b>	99.1%	99.4%
<b>Content Uniformity:</b>	99.2%	99.4%
<b>Strength:</b>	200 mg	200 mg
<b>Dosage Form:</b>	Tablet	Tablet
<b>Dose Administered:</b>	200 mg	200 mg
<b>Study Condition:</b>	Fasting	Fasting
<b>Length of Fasting:</b>	10 hours	10 hours

### RANDOMIZATION

### DESIGN

<b>Randomized:</b>	Y	<b>Design Type:</b>	Crossover
<b>No. of Sequences:</b>	2	<b>Replicated Treatment Design:</b>	N
<b>No. of Periods:</b>	2	<b>Balanced:</b>	Y
<b>No. of Treatments:</b>	2	<b>Washout Period:</b>	7 days

AB: 2,3,4,6,8,9,13,15,16,20,21,22,25

BA: 1,5,7,10,11,12,14,17,18,19,23,24,26

### DOSING

### SUBJECTS

<b>Single or Multiple Dose:</b>	Single	<b>IRB Approval:</b>	Y
<b>Steady State:</b>	N	<b>Informed Consent Obtained:</b>	Y
<b>Volume of Liquid Intake:</b>	240 mL	<b>No. of Subjects Enrolled:</b>	26
<b>Route of Administration:</b>	Oral	<b>No. of Subjects Completing:</b>	26
<b>Dosing Interval:</b>	N/A	<b>No. of Subjects Plasma Analyzed:</b>	24
<b>Number of Doses:</b>	N/A	<b>No. of Dropouts:</b>	0
<b>Loading Dose:</b>	N/A	<b>Sex(es) Included:</b>	Male
<b>Steady State Dose Time:</b>	N/A	<b>Healthy Volunteers Only:</b>	Y
<b>Length of Infusion:</b>	N/A	<b>No. of Adverse Events:</b>	0

Samples from subject numbers 1-24 were analyzed as per protocol.

**Subject Demographics:**

<b>Race:</b>	White 18, African American 4, Asian 2, Hispanic 1, Other 1
<b>Sex:</b>	Male 26, Female 0
<b>Height:</b>	Mean: 70.3 inches, range 66-75 inches
<b>Weight:</b>	Mean: 173.9 lbs., range 130-220 lbs
<b>Age group:</b>	<18      0 18-40    25 41-64    1 65-75    0 >75      0, Mean age: 29.2 years, range 20-43 years

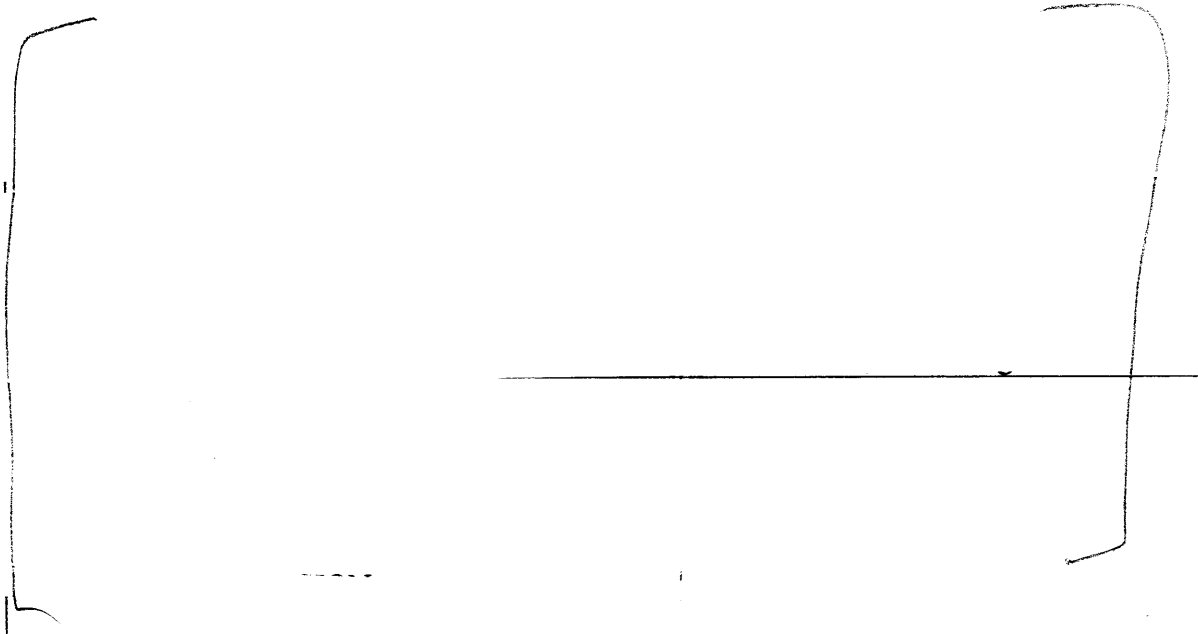
<b>Dietary Restrictions:</b>	No alcohol-, grapefruit or xanthine-containing food/beverages 24 hours before the study and during the study confinement. No water 1 hr pre-dose and 1 hr post-dose.
<b>Activity Restrictions:</b>	Subjects remained seated (or semi-reclined if necessary) for the first 4 hours, except when warranted by adverse events. No strenuous activity during the housing period.
<b>Drug Restrictions:</b>	No prescription medication within 7 days and OTC medication within 3 days prior to study. This prohibition did not include vitamins taken as nutritional supplements for non-therapeutic indications, as judged by attending physician.
<b>Blood Sampling:</b>	1x10 mL in evacuated tubes containing sodium heparin. Pre-dose (0 h) and 0.25, 0.5, 0.75, 1, 1.5, 2, 2.5, 3, 4, 6, 9, 10, 12 and 15 hours after dosing.

**Study Results****1) Clinical**

**Protocol Deviations:** There were six sampling time deviations of 3 minutes or less.

**2) Analytical (Not to be Released Under FOI)**

**Pre-Study Assay Validation:**



Reassays: Of the 11 samples repeated, 8 were repeated because the chromatograms were not evaluable. Two samples were repeated due to irregularity of the values (anomalous values). There was no significant difference in the original values and the reassay values. One sample was repeated to confirm the original value.

**Comments:** The analytical method is acceptable.

### 3) Pharmacokinetics:

<b>Mean Plasma Concentration:</b>	Table 1, Figure 1
<b>Pharmacokinetic Parameters:</b>	Table 1
<b>90% Confidence Intervals:</b>	LAUC <sub>0-t</sub> 95.85-103.14%
	LAUC <sub>0-inf</sub> 95.86-103.10%
	LC <sub>max</sub> 84.35-100.19%
<b>AUC<sub>0-t</sub> /AUC<sub>0-inf</sub> ratios:</b>	Test 0.98 (0.97-0.99)
	Reference 0.98 (0.96-0.99)
<b>Root MSE:</b>	LAUC <sub>0-t</sub> 0.073922
	LAUC <sub>0-inf</sub> 0.073443
	LC <sub>max</sub> 0.173572

**Comments:**

1. The reviewer recalculated pharmacokinetic parameters and 90% confidence intervals. The reported values are in good agreement with those obtained by the reviewer.

- Subject #7 had pre-dose drug concentration in period 1 (reference drug). Since this concentration was less than 5% of  $C_{max}$  value in this subject, the subject's data were not excluded.
- The 90% confidence intervals for log transformed  $AUC_{0-t}$ ,  $AUC_{0-inf}$ , and  $C_{max}$  are within acceptable limits. There was statistically significant sequence effect for  $LC_{max}$ .

**Conclusion:** The fasting study is acceptable.

**Protocol No.:** AAI-US-83, An Open Label Randomized Pharmacokinetic Study to Determine Effect of Food on the Bioequivalence of Oral Ibuprofen Formulations in Normal Healthy Male Volunteers.

### Study Information

#### STUDY FACILITY INFORMATION

Clinical Facility:	
Medical Director:	
Clinical Study Dates:	Period I 10/22/00 Period II 10/29/00 Period III 11/05/00
Analytical Facility	
Analytical Director:	
Analytical Study Dates:	November 8 to 26, 2000
Storage Period:	34 days

#### TREATMENT INFORMATION

Treatment ID:	C	A	B
Test or Reference:	T	T	R
Product Name:	Ibuprofen tablets	Ibuprofen tablets	Nuprin
Manufacturer:	Cheminor Drugs	Cheminor Drugs	Bristol-Myers
Manufacture Date:	5/2000	5/2000	N/A
Expiration Date:	N/A	N/A	11/2001
ANDA Batch Size:	— tablets	— tablets	N/A
Batch/Lot Number:	H001	H001	811536
Potency:	99.1%	99.1%	99.4%
Content Uniformity:	99.2%	99.2%	99.4%
Strength:	200 mg	200 mg	200 mg
Dosage Form:	Tablet	Tablet	Tablet
Dose Administered:	200 mg	200 mg	200 mg
Study Condition:	Fasting	Fed	Fed
Length of Fasting:	10 hours	10 hours	10 hours
Standardized Breakfast:	N/A	Y	Y
Breakfast Specifics:	N/A	1 buttered English muffin, 1 fried	1 buttered English muffin, 1 fried



		egg, 1 slice of American cheese, 1 rasher of Canadian bacon, 1 serving of hash brown potatoes, 10 fL oz. of orange juice, 8 oz. whole milk	egg, 1 slice of American cheese, 1 rasher of Canadian bacon, 1 serving of hash brown potatoes, 10 fL oz. of orange juice, 8 oz. whole milk
<b>Standardized Lunch:</b>	Y	Y	Y

#### RANDOMIZATION

#### DESIGN

<b>Randomized:</b>	Y	<b>Design Type:</b>	Crossover
<b>No. of Sequences:</b>	6	<b>Replicated Treatment Design:</b>	N
<b>No. of Periods:</b>	3	<b>Balanced:</b>	N
<b>No. of Treatments:</b>	3	<b>Washout Period:</b>	7 days

BCA: 8,11,15

CBA: 2,3,5,21

ACB: 6,7,10,16

BAC: 9,17,18,19

ABC: 1,4,13

CAB: 12,14,20

#### DOSING

#### SUBJECTS

<b>Single or Multiple Dose:</b>	Single	<b>IRB Approval:</b>	Y
<b>Steady State:</b>	N	<b>Informed Consent Obtained:</b>	Y
<b>Volume of Liquid Intake:</b>	240 mL	<b>No. of Subjects Enrolled:</b>	21
<b>Route of Administration:</b>	Oral	<b>No. of Subjects Completing:</b>	21
<b>Dosing Interval:</b>	N/A	<b>No. of Subjects Plasma Analyzed:</b>	21
<b>Number of Doses:</b>	N/A	<b>No. of Dropouts:</b>	0
<b>Loading Dose:</b>	N/A	<b>Sex(es) Included:</b>	Male
<b>Steady State Dose Time:</b>	N/A	<b>Healthy Volunteers Only:</b>	Y
<b>Length of Infusion:</b>	N/A	<b>No. of Adverse Events:</b>	5

#### Subject Demographics:

<b>Race:</b>	White 14, African American 5, Asian 1, Other 1										
<b>Sex:</b>	Male 21, Female 0										
<b>Height:</b>	Mean: 70.5 inches, range: 65-74 inches										
<b>Weight:</b>	Mean: 182 lbs., range: 142-227 lbs.										
<b>Age group:</b>	<table> <tr> <td>&lt;18</td><td>0</td></tr> <tr> <td>18-41</td><td>17</td></tr> <tr> <td>41-65</td><td>4</td></tr> <tr> <td>65-76</td><td>0</td></tr> <tr> <td>&gt;75</td><td>0, Mean age: 32 years, range: 18-45 years</td></tr> </table>	<18	0	18-41	17	41-65	4	65-76	0	>75	0, Mean age: 32 years, range: 18-45 years
<18	0										
18-41	17										
41-65	4										
65-76	0										
>75	0, Mean age: 32 years, range: 18-45 years										

<b>Dietary Restrictions:</b>	No alcohol- or grapefruit and xanthine-containing foods/beverages 24 hours pre-dose and throughout the period of sample collection.
<b>Activity Restrictions:</b>	Subjects remained seated (or semi-reclined if necessary) for the first 4 hours post-dose, except when warranted by adverse events. No strenuous activity during the housing period.

<b>Drug Restrictions:</b>	No prescription medication for 7 days preceding the study and no OTC medications 3 days preceding the study. This prohibition did not include vitamins taken as nutritional supplements for non-therapeutic indications, as judged by an attending physician.
<b>Blood Sampling:</b>	Same as in fasting study

### **Study Results**

#### **1) Clinical**

##### **Adverse Events:**

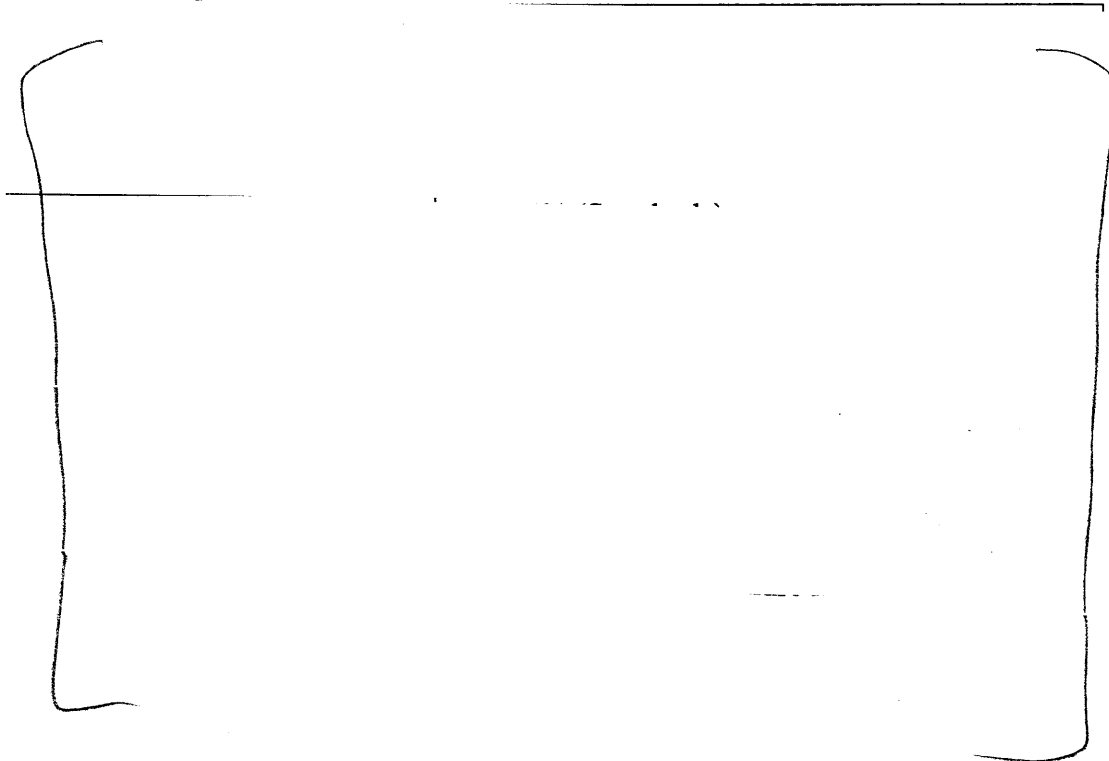
<b>Subject</b>	<b>Complaint</b>	<b>Treatment</b>	<b>Intensity/Relationship</b>
10	Hematoma	Ref-fed	Mild/remote
13*	Fatigue, Nausea, Fever, Diarrhea	Ref-fed	Moderate/remote

\* All events occurred approximately 24 hours after dosing.

**Protocol Deviations:** There were 8 sampling time deviations of 2 minutes or less.

#### **2) Analytical (Not to be Released Under FOI)**

##### **Within-Study**



##### **Comments:**

1. The reviewer recalculated pharmacokinetic parameters and ratios of means. The reported values are in good agreement with those obtained by the reviewer.

2. The ratios of means are within acceptable limits.

**Conclusion:** The non-fasting study is acceptable.

**Formulation** (Not to be released under FOI)

<b>Ingredient</b>	<b>mg/tablet</b>	<b>% w/w</b>
Ibuprofen, USP	200.0	
Microcrystalline Cellulose, NF		
Copovidone Ph. Eur		
Sodium Starch Glycolate, NF		
Colloidal Silicon Dioxide,		
Magnesium Stearate, NF		
Hydroxypropyl methylcellulose, USP		
Triacetin, USP		
Polysorbate 80, NF		
<b>Total Weight (Coated)</b>		

**Test tablets:** Brown, round, biconvex film coated tablets, embossed 'C2' on one side and plain on the other side.

**Reference tablets:** Yellow, round, biconvex film coated tablets embossed 'NUPRIN' on one side and plain on the other side.

The reference listed drug NUPRIN<sup>®</sup> is supplied as golden yellow round tablets and as golden yellow caplets. The test product is a tablet. Nuprin<sup>®</sup> tablets were compared with the test tablets in the bio-studies in this ANDA.

**Dissolution** (Not to be released under FOI)

Dissolution Method: USP 24

Dissolution Medium: pH 7.2 phosphate buffer

Volume: 900 mL

Dissolution Apparatus: 2 (paddle), 50 rpm

### Mean Dissolution Data

Test				Reference		
Lot No.: H001				Lot No.: 811536		
Strength: 200 mg				Strength: 200 mg		
No. of Units: 12				No. of Units: 12		
Time(min)	Mean	Range	%CV	Mean	Range	%CV
0	0	—	0	0	—	0
10	79	—	8.8	81	—	5.8
20	88	—	2.3	97	—	1.9
30	91	—	1.4	100	—	2.4
45	93	—	0.9	101	—	2.3
60	96	—	0.7	103	—	2.4
75	95	—	2.1	104	—	2.5


**Dissolution Comments:** The dissolution testing was conducted using the USP method. The test product meets the USP specification of NLT — (Q) in 60 minutes. The test and reference tablets dissolve more than — in 20 minutes and therefore f2 test is not relevant.

### Recommendations:


1. The bioequivalence study conducted under fasting conditions by Dr. Reddy's Laboratories on its ibuprofen 200 mg tablets, lot #H001 comparing it to Nuprin<sup>®</sup> 200 mg tablets, lot #811536 manufactured by Bristol-Myers is acceptable to the Division of Bioequivalence. The study demonstrates that ibuprofen 200 mg tablet manufactured by Dr. Reddy's Laboratories is bioequivalent to the reference product, Nuprin<sup>®</sup> 200 mg tablet manufactured by Bristol-Myers.
2. The bioequivalence study conducted under non-fasting conditions by Dr. Reddy's Laboratories on its ibuprofen 200 mg tablets, lot #H001 comparing it to Nuprin<sup>®</sup> 200 mg tablets, lot #811536 manufactured by Bristol-Myers is acceptable to the Division of Bioequivalence. The study demonstrates that under non-fasting conditions, the bioavailability of ibuprofen 200 mg tablet manufactured by Dr. Reddy's Laboratories is similar to the reference product, Nuprin<sup>®</sup> 200 mg tablet manufactured by Bristol-Myers.
3. The dissolution testing conducted by the firm on its ibuprofen tablets is acceptable. The dissolution testing should be incorporated into firm's manufacturing controls and stability programs. The dissolution testing should be conducted in 900 mL of pH 7.2 phosphate buffer at 37°C using apparatus 2 (paddle) at 50 rpm. The test product should meet the following specifications:



Not less than — (Q) of the labeled amount of ibuprofen in the dosage form is dissolved in 60 minutes.

4. From bioequivalence point of view, the firm has met the requirements for *in vivo* bioequivalence and *in vitro* dissolution testing and the application is acceptable.

 8/27/01  
Kuldeep R. Dhariwal, Ph.D.  
Review Branch II  
Division of Bioequivalence

RD INITIALED S. NERURKAR  
FT INITIALED S. NERURKAR

 Date 8/27/2001

Concur:  Date 8/28/2001  
 Dale P. Conner, Pharm.D.  
Director, Division of Bioequivalence

**APPEARS THIS WAY  
ON ORIGINAL**

Table 1

MEAN PLASMA IBUPROFEN LEVELS FOR TEST (1) AND REFERENCE (2) PRODUCTS, n=24

	MEAN1	SD1	MEAN2	SD2	RMEAN12
TIME HR					
0	0.00	0.00	0.02	0.09	0.00
0.25	2.40	2.66	4.43	4.75	0.54
0.5	7.40	5.29	12.47	8.58	0.59
0.75	11.44	6.76	14.72	7.94	0.78
1	13.22	6.53	14.33	6.35	0.92
1.5	14.02	5.05	13.74	4.95	1.02
2	14.00	3.95	13.22	4.03	1.06
2.5	12.94	3.20	11.77	3.39	1.10
3	12.07	2.35	10.96	3.05	1.10
4	9.17	2.02	8.78	2.55	1.05
6	4.00	0.97	4.01	1.51	1.00
9	1.68	0.51	1.71	0.72	0.98
12	0.73	0.31	0.73	0.39	1.00
15	0.22	0.24	0.25	0.25	0.90

UNIT: PLASMA LEVEL=MICROGRAM/ML TIME=HRS

## ARITHMETIC MEANS AND RATIOS

	MEAN1	SD1	MEAN2	SD2	RMEAN12
PARAMETER					
AUCI	72.25	10.96	72.89	12.43	0.99
AUCT	70.71	10.56	71.36	12.20	0.99
CMAX	17.95	2.99	19.78	4.39	0.91
KE	0.32	0.04	0.32	0.05	1.00
LAUCI	71.44	0.15	71.86	0.17	0.99
LAUCT	69.94	0.15	70.34	0.17	0.99
LCMAX	17.70	0.18	19.25	0.25	0.92
THALF	2.19	0.30	2.19	0.31	1.00
TMAX	1.75	0.84	1.49	0.96	1.17

UNIT: AUC=MICROGRAM HR/ML CMAX=MICROGRAM/ML TMAX=HR  
 LOG-TRANSFORMED DATA WERE CONVERTED TO ANTI-LOG IN THE TABLE  
 LSMEANS AND 90% CONFIDENCE INTERVALS

	LSM1	LSM2	RLSM12	LOWCI12	UPPCI12
PARAMETER					
AUCI	72.25	72.89	0.99	95.57	102.68
AUCT	70.71	71.36	0.99	95.51	102.66
CMAX	17.95	19.78	0.91	83.37	98.17
LAUCI	71.44	71.86	0.99	95.86	103.10
LAUCT	69.94	70.34	0.99	95.85	103.14
LCMAX	17.70	19.25	0.92	84.35	100.19

Table 2

MEAN PLASMA IBUPROFEN LEVELS FOR TEST AND REFERENCE PRODUCTS IN NON-FASTING STUDY, N=21

	MEAN1	SD1	MEAN2	SD2	MEAN3	SD3	RMEAN12
TIME HR							
0	0.00	0.00	0.00	0.00	0.00	0.00	.
0.25	1.72	2.08	1.35	2.17	0.10	0.39	1.28
0.5	5.41	4.57	6.56	7.01	4.87	6.81	0.82
0.75	8.09	6.37	8.31	7.13	9.32	7.76	0.97
1	9.94	6.43	9.39	6.18	11.21	6.21	1.06
1.5	12.73	5.99	10.50	2.82	11.30	3.75	1.21
2	12.62	4.83	10.43	1.91	10.76	1.98	1.21
2.5	12.34	2.89	9.64	2.11	10.08	2.90	1.28
3	11.44	2.62	8.48	2.30	8.79	2.76	1.35
4	8.81	2.67	6.98	2.35	6.77	2.20	1.26
6	3.92	1.25	3.51	1.76	3.44	1.34	1.12
9	1.58	0.57	1.71	1.07	1.45	0.67	0.93
12	0.63	0.35	0.76	0.63	0.60	0.39	0.83
15	0.24	0.24	0.26	0.33	0.21	0.23	0.91

(CONTINUED)

UNIT: PLASMA LEVEL=MICROGRAM/ML TIME=HRS

MEAN PLASMA IBUPROFEN LEVELS FOR TEST AND REFERENCE PRODUCTS

	RMEAN13	RMEAN23
TIME HR		
0	.	.
0.25	16.99	13.32
0.5	1.11	1.35
0.75	0.87	0.89
1	0.89	0.84
1.5	1.13	0.93
2	1.17	0.97
2.5	1.22	0.96
3	1.30	0.96
4	1.30	1.03
6	1.14	1.02
9	1.09	1.18
12	1.06	1.28
15	1.16	1.28

1= Test fasting  
2= Test fed  
3= Reference fed

Table 3

## IBUPROFEN ARITHMETIC MEANS AND RATIOS IN NON-FASTING STUDY, N=21

	MEAN1	SD1	MEAN2	SD2	MEAN3	SD3	RMEAN12
PARAMETER							
AUCI	66.05	15.05	57.70	13.58	56.77	12.08	1.14
AUCT	64.66	14.66	55.92	12.79	55.24	11.87	1.16
CMAX	16.31	3.72	14.06	3.73	14.90	4.56	1.16
KE	0.33	0.06	0.31	0.07	0.31	0.06	1.07
LAUCI	64.42	0.23	56.22	0.23	55.58	0.21	1.15
LAUCT	63.06	0.23	54.55	0.23	54.06	0.21	1.16
LCMAX	15.86	0.25	13.63	0.25	14.28	0.30	1.16
THALF	2.17	0.34	2.38	0.54	2.28	0.39	0.91
TMAX	1.96	0.96	1.56	0.96	1.56	0.77	1.26

(CONTINUED)

UNIT: AUC=MICROGRAM HR/ML CMAX=MICROGRAM/ML TMAX=HR  
 LOG-TRANSFORMED DATA WERE CONVERTED TO ANTI-LOG IN THE TABLE

## ARITHMETIC MEANS AND RATIOS

	RMEAN13	RMEAN23
PARAMETER		
AUCI	1.16	1.02
AUCT	1.17	1.01
CMAX	1.09	0.94
KE	1.04	0.97
LAUCI	1.16	1.01
LAUCT	1.17	1.01
LCMAX	1.11	0.95
THALF	0.95	1.04
TMAX	1.26	1.00

UNIT: AUC=MICROGRAM HR/ML CMAX=MICROGRAM/ML TMAX=HR  
 LOG-TRANSFORMED DATA WERE CONVERTED TO ANTI-LOG IN THE TABLE

## LSMEANS AND RATIOS

	LSM1	LSM2	LSM3	RLSM12	RLSM13	RLSM23
PARAMETER						
AUCI	66.01	57.66	56.73	1.14	1.16	1.02
AUCT	64.63	55.89	55.22	1.16	1.17	1.01
CMAX	16.32	14.07	14.92	1.16	1.09	0.94
LAUCI	64.52	56.31	55.66	1.15	1.16	1.01
LAUCT	63.17	54.65	54.15	1.16	1.17	1.01
LCMAX	15.90	13.66	14.31	1.16	1.11	0.95

1= Test fasting  
 2= Test fed  
 3= Reference fed



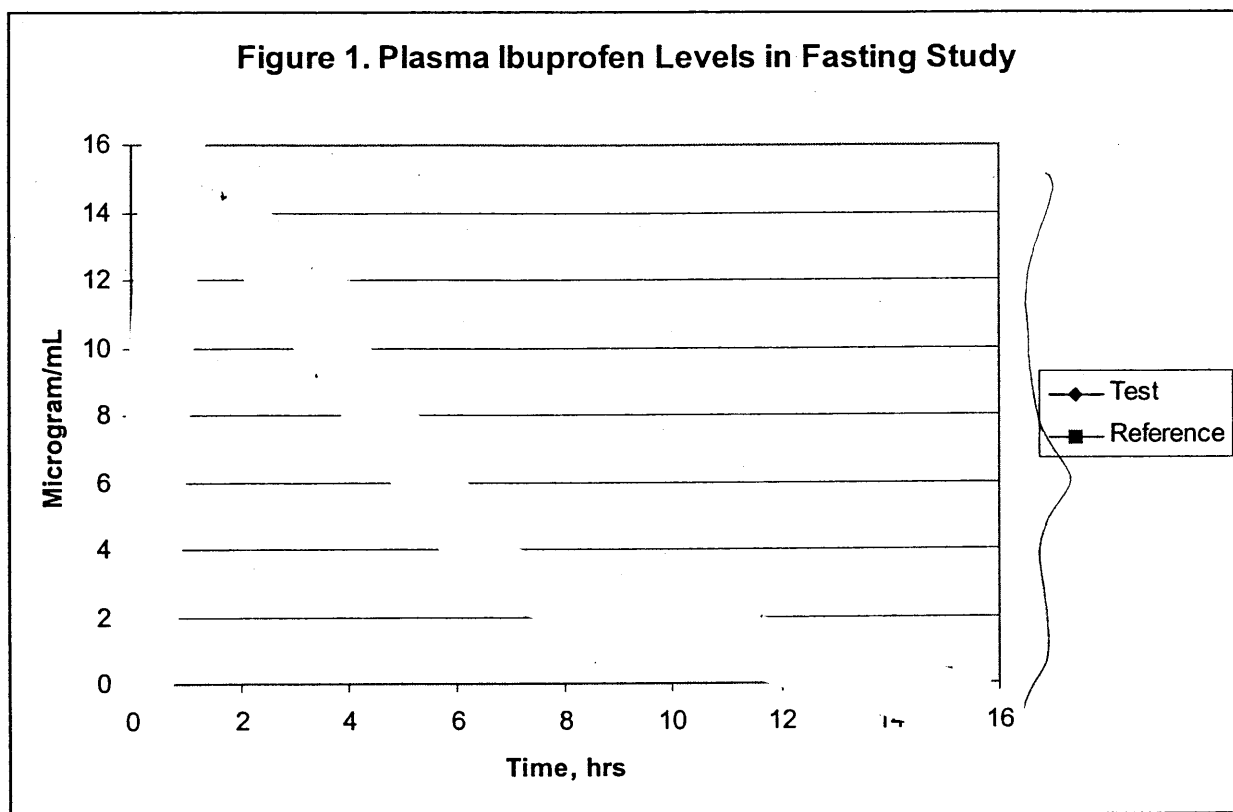
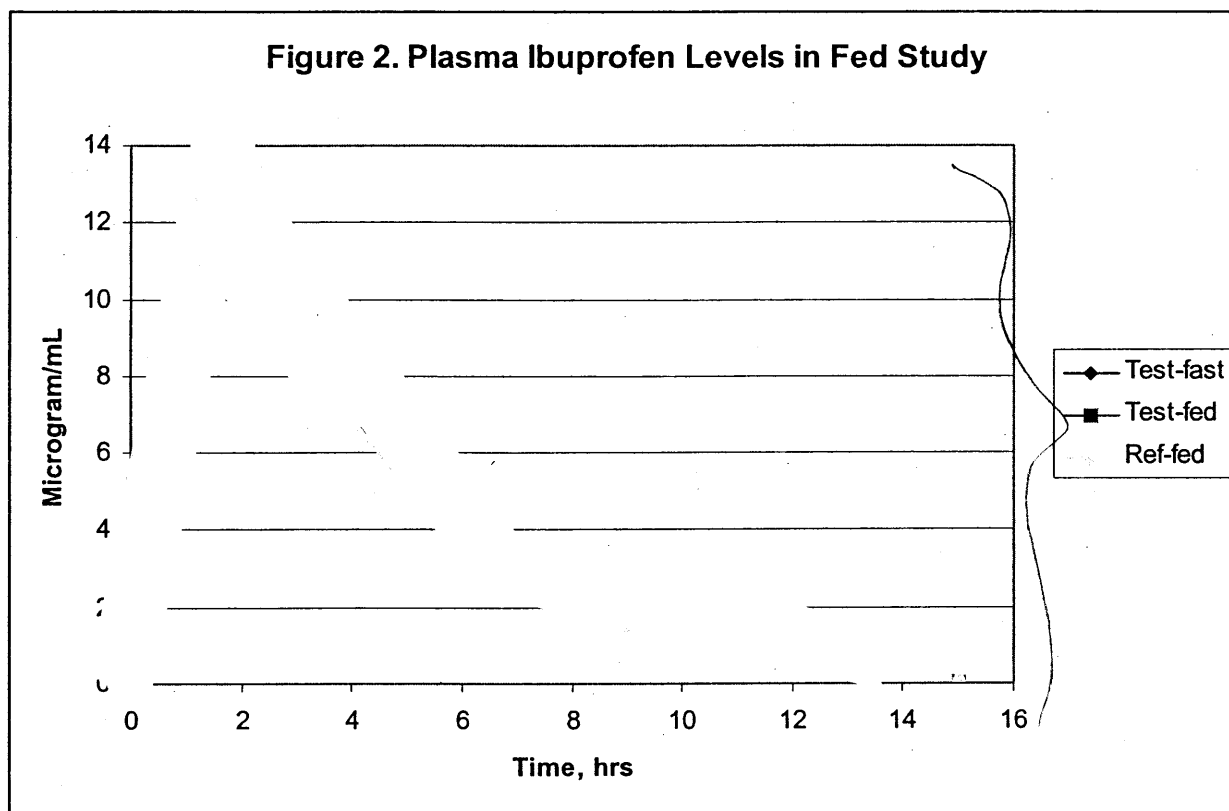


Figure 2. Plasma Ibuprofen Levels in Fed Study



CC: ANDA 76-117  
ANDA DUPLICATE  
DIVISION FILE  
HFD-651/ Bio Drug File  
HFD-655/ Dhariwal

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Endorsements: (Final with Dates)  
HFD-655/ Dhariwal 8/27/01  
HFD-655/ Nerurkar  
HFD-650/ D. Conner for Rev 8/28/2001

181/ 8/27/01

BIOEQUIVALENCY - ACCEPTABLE

Submission dates: 2/14/01  
5/11/01

- |    |                          |                   |
|----|--------------------------|-------------------|
| 1. | FASTING STUDY (STF)      | Strengths: 200 mg |
|    | Analytical: _____        | ✓ Outcome: AC     |
| 2. | FOOD STUDY (STP)         | Strengths: 200 mg |
|    | Clinical: _____          | ✓ Outcome: AC     |
|    | Analytical: _____        |                   |
| 3. | STUDY AMENDMENT (STA)    | Strengths: 200 mg |
|    | Long-term stability data | ✓ Outcome: AC     |
|    | 5/11/2001                |                   |

Outcome Decisions: AC - Acceptable

WinBio Comments:

BIOEQUIVALENCY COMMENTS TO BE PROVIDED TO THE APPLICANT

ANDA: 76-117

APPLICANT: Dr. Reddy's Laboratories

DRUG PRODUCT: Ibuprofen tablets, USP  
200 mg

The Division of Bioequivalence has completed its review and has no further questions at this time.

The dissolution testing will need to be incorporated into your stability and quality control programs as specified in USP 24.

Please note that the bioequivalency comments provided in this communication are preliminary. These comments are subject to revision after review of the entire application, upon consideration of the chemistry, manufacturing and controls, microbiology, labeling, or other scientific or regulatory issues. Please be advised that these reviews may result in the need for additional bioequivalency information and/or studies, or may result in a conclusion that the proposed formulation is not approvable.

Sincerely yours,

*f*

*ISI*  
Dale P. Conner, Pharm. D.  
Director, Division of Bioequivalence  
Office of Generic Drugs  
Center for Drug Evaluation and Research

CC: ANDA 76-117  
ANDA DUPLICATE  
DIVISION FILE  
HFD-651/ Bio Drug File  
HFD-655/ Dhariwal

V:\FIRMSAM\CHEMINOR\LTRS&REV\76117SD.201

Endorsements: (Final with Dates)  
HFD-655/ Dhariwal *15/12/01*  
HFD-655/ Nerurkar  
HFD-650/ D. Conner *for Ave 8/28/2001*

*15/12/01*

BIOEQUIVALENCY - ACCEPTABLE

Submission dates: 2/14/01  
5/11/01

- |    |                                                                  |                                    |
|----|------------------------------------------------------------------|------------------------------------|
| 1. | FASTING STUDY (STP)<br>Clinical: _____<br>Analytical: _____      | Strengths: 200 mg<br>✓ Outcome: AC |
| 2. | FOOD STUDY (STP)<br>Clinical: _____<br>Analytical: _____         | Strengths: 200 mg<br>✓ Outcome: AC |
| 3. | STUDY AMENDMENT (STA)<br>Long-term stability data<br>x 5/11/2001 | Strengths: 200 mg<br>✓ Outcome: AC |

Outcome Decisions: AC - Acceptable

WinBio Comments:

**CENTER FOR DRUG  
EVALUATION AND  
RESEARCH**

**APPLICATION NUMBER:**

76-117

**ADMINISTRATIVE  
DOCUMENTS**

**OFFICE OF GENERIC DRUGS**  
**ABBREVIATED NEW DRUG APPLICATION**

**ANDA ~~TENTATIVE~~ APPROVAL SUMMARY**

**ANDA:** 76-117

**DRUG PRODUCT:** Ibuprofen, USP

**FIRM:** Dr. Reddy's Laboratories Limited

**DOSAGE FORM:** Oral Tablets

**STRENGTH:** 200 mg

**cGMP STATEMENT/EIR UPDATE STATUS:**

The cGMP Statement located in Vol. 1.7, page 2235 is satisfactory.

The overall recommendation for the Establishment Evaluation Request is acceptable (3/29/01).

**BIO STUDY:**

Acceptable August 28, 2001 (Bio review dated 5/11/01). The recommended dissolution specifications are as follows:

The dissolution testing should be conducted in 900 ml of phosphate buffer, pH 7.2 at 37°C using USP Apparatus II (paddle) at 50 rpm. The test product should meet the following specifications:

Not less than  (Q) of the labeled amount of Ibuprofen is dissolved in 60 minutes.

**VALIDATION:**

The drug substances and drug product are both USP compendial. FDA methods validation is not required.

**STABILITY- (ARE CONTAINERS USED IN STUDY IDENTICAL TO THOSE IN CONTAINER SECTION?) :**

The containers used in the accelerated and room temperature studies are the same as proposed in the application. The firm provided 12 weeks accelerated conditions and 6 months controlled room temperature stability data for the drug product packaged in 24's and 500's container/closure system.

The accelerated stability data supports Dr. Reddy's proposed tentative expiry date of 24 months.

Stability test and specifications are as follows:

**Assay:**

Ibuprofen \_\_\_\_\_ of the labeled amount of Ibuprofen.

**Dissolution:**

The dissolution testing should be conducted in 900 ml of phosphate buffer, pH 7.2 at 37°C using USP Apparatus II (paddle) at 50 rpm. The test product should meet the following specifications:

Not less than — (Q) of the labeled amount of Ibuprofen is dissolved in 60 minutes.

**Appearance:**

Brown round, biconvex, film coated tablets, embossed "C2" on one side and the other side is plain.

\_\_\_\_\_: NMT \_\_\_\_\_

Limit of \_\_\_\_\_ NMT \_\_\_\_\_

**Related Substances:**

Maximum individual impurity: NMT \_\_\_\_\_

Total Impurities: NMT \_\_\_\_\_

**LABELING Review Status:** Acceptable

Labeling acceptable September 4, 2001 by John Grace and Jim Barlow.

**STERILIZATION VALIDATION (IF APPLICABLE):** N/A

**SIZE OF BIO BATCH:**

Dr. Reddy's Laboratories manufactured one bio batch, 200 mg (Lot # H001). This batch was used for stability studies.

Ibuprofen, drug substance, used in the bio batches is supplied by \_\_\_\_\_ The drug substance is a Type II DMF # \_\_\_\_\_ and is adequate as of 04/7/00.

**SIZE OF STABILITY BATCHES - (IF DIFFERENT FROM BIO BATCH WERE THEY MANUFACTURED VIA THE SAME PROCESS?):**

Dr. Reddy's Laboratories, Inc. manufactured one exhibit batch: Batch #: H001. This batch is used as the bio-batch and used in the stability studies.



PROPOSED PRODUCTION BATCH - (MANUFACTURING PROCESS THE SAME AS  
BIO/STABILITY?): The proposed post-approval batch size is  
— tablets.

CHEMIST: R.F. Powers, Ph.D.

DATE: 10/23/01

Team Leader: A. Mueller, Ph.D.

DATE: 10/23/01

APPEARS THIS WAY  
ON ORIGINAL

**CENTER FOR DRUG  
EVALUATION AND  
RESEARCH**

**APPLICATION NUMBER:**

76-117

**CORRESPONDENCE**

p/a/or AM noted  
to CMC Reviewer  
for review.  
JMS



DR. REDDY'S

Dr. Reddy's Laboratories, Inc.

ONE PARK WAY

UPPER SADDLE RIVER, NJ 07458

TELEPHONE: (201) 760-2880

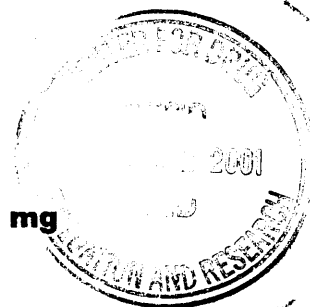
FAX: (201) 760-0401

Office of Generic Drugs  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Document Control Room  
Metro Park North II  
7500 Standish Place, Room 150  
Rockville, MD 20855-2773

OCT 01 2001

ORIG AMENDMENT

N/FA



**Reference: ANDA # 76-117 Ibuprofen Tablets USP, 200 mg**  
**Minor Amendment**

Dear Sir/ Madam:

Dr. Reddy's Laboratories Inc., US Agent for Dr. Reddy's Laboratories Limited, is providing this response to the Minor NA dated July 27, 2001 on their behalf. Reference is made to the original submission and the amendment dated September 14, 2001 and the original submission dated May 15, 2001.

The foreign firm inadvertently submitted the amendment without the knowledge of the US agent. At the request of the agency, the US agent obtained a copy from the foreign firm, and it is hereby being resubmitted at this time. As requested, the US agent has informed the foreign firm of the legal requirements to submit through the US agent. The firm apologizes for this misunderstanding on their part and for any incontinence that this has caused. The following submission supercedes the minor amendment response previously provided.

**A. Chemistry Deficiencies:**

1)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Redacted** \_\_\_\_\_

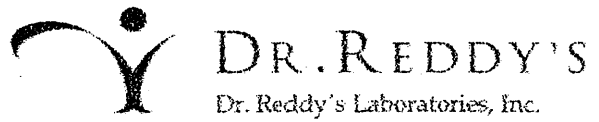
**pages of trade**

**secret and /or**

**confidential**

**commercial**

**information**



*B. In addition to responding to the deficiencies presented above, please note and acknowledge the following comments in your response:*

- 1) Please be aware that any Bioequivalence deficiencies must be resolved prior to approval of the ANDA*

The Firm acknowledges that any Bioequivalence deficiencies must be resolved prior to approval of the ANDA.

- 2) Please be aware that any labeling deficiencies must be resolved prior to approval of the ANDA*

The Firm acknowledges that any labeling deficiencies must be resolved prior to approval of the ANDA.

- 3) Please provide any additional stability data accrued to date.*

The updated long-term (25° C/60% RH) stability data for 12 months is provided in Section XVI Stability of Finished Dosage Form.

- 4) Please acknowledge that the USP methods are the regulatory methods and will prevail in resolution in any dispute.*

The Firm acknowledges that the USP methods are the regulatory methods and will prevail in resolution in any dispute.

*Labeling Deficiencies:*

**GENERAL COMMENTS**

*Revise your labels and labeling to be in accordance with the most recently approved labels and labeling for the reference drug, Motrin IB (NDA 19-012/S-024; approved October 2, 2000, to be in conformance with the OTC Labeling Final Rule 21 CFR 201.66). (See attached copy)*

*Please revise your labels and labeling, as instructed above, and submit in final print or draft if you prefer.*

The labels and labeling have been revised as per the currently approved reference listed drug Motrin® IB, as recommended by the agency.



The revised labels and labeling including 12 final printed copies are provided in the following Sections:

Section IV: Side by Side Comparison of Previously Submitted Container Label and Proposed Container Label Package Sizes: 24's, 50's, 100's, 150's, 200's, 250's and 500's count

Side by Side Comparison of Previously Submitted Carton Label and Proposed Carton Label Package Sizes: 24's, 50's, 100's, 150's, 200's, 250's and 500's count

Side by Side Comparison of Previously Submitted Package Insert Label and Proposed Package Insert Label

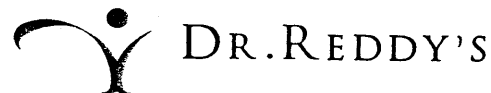
Section V: Proposed Container Labels  
Proposed Carton Labels  
Proposed Package Insert Label (PIL)

Please communicate any remaining questions or issues to C. Jeanne Taborsky, and they will be addressed and a response submitted. This concludes our submission. Please feel free to contact me if you have any questions, tele (410) 309-3145, Fax (410) 309-6145.

Sincerely yours,

A handwritten signature in cursive script that reads 'C. Jeanne Taborsky'.

C. Jeanne Taborsky  
Regulatory Affairs



Dr. Reddy's Laboratories Limited  
GENERIC

Bachepalli - 502 325, INDIA.  
Mailing Address : Bachepalli,  
Post Bag No.15, Kukatpally P.O.,  
Hyderabad - 500 072, INDIA.

Tel : 91 40 304 5206  
Fax: 91 40 304 5238  
www.drreddys.com

Date: Aug 16<sup>th</sup>, 2001

**Office of Generic Drugs**  
Center for Drug Evaluation and Research  
Food and Drug Administration  
Document Control Room  
Metro Park North II  
7500 Standish Place, Room 150  
Rockville, MD 20855-2773

**ORIG AMENDMENT**

N/FA

**Fax Amendment**

Reference: Ibuprofen Tablets, USP, 200 mg.  
ANDA No.: 76-117

Dear Sir/ Madam:

This is in reference to your letter dated July 27, 2001 regarding our pending ANDA 76-117 for Ibuprofen Tablets, USP, 200 mg. Dr. Reddy's Laboratories Limited (DRL) herewith submits the "Fax Amendment" including the following information in response to the Agency's Correspondence:

**A. Chemistry Deficiencies:**

**FDA Comment:**



Regd. Office:  
7-1-27, Ameerpet,  
Hyderabad 500 016, INDIA.  
Tel : 91 40 373 1946  
Fax : 91 40 373 1955

**Redacted** \_\_\_\_\_

**pages of trade secret and/or**

**confidential**

**commercial**

**information**



::3::

**FDA Comment**

- 5) We note that you have not provided the percent recovery data for each impurity in spiked samples (for example, page 3120, Vol. 1.9, Figure 6). Please provide.

**Response:**

The percent recovery data at spiked levels of \_\_\_\_\_ is provided in *Exhibit – IV*.

**FDA Comment**

- 6) Please add a statement to your Post Approval Stability Protocol that any extension of the expiration dating period will be based on the drug product's room temperature stability data.

**Response:**

As recommended by the Agency, the Post Approval Stability Protocol has been revised to include the Statement "Any extension of the expiration dating period will be based on the drug product's room temperature stability data. The revised Post Approval Stability Protocol is provided in *Exhibit – V*.

- B. In addition to responding to the deficiencies presented above, please note and acknowledge the following comments in your response:

**FDA Comment:**

- 1) Please be aware that any Bioequivalency deficiencies must be resolved prior to approval of the ANDA.

**Response:**

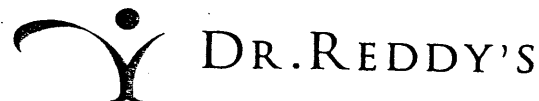
We note and acknowledge the agency's comment.

**FDA Comment:**

- 2) Please be aware that any labeling deficiencies must be resolved prior to approval of the ANDA.

**Response:**

We note and acknowledge the agency's comment.



::4::

**FDA Comment:**

- 3) Please provide any additional stability data accrued to date.

**Response:**

The updated long term (25°C/60% RH) stability data for 12 months is provided in *Exhibit – VI*.

**FDA Comment:**

- 4) Please acknowledge that the USP methods are the regulatory methods and will prevail in resolution in any dispute.

**Response:**

We note and acknowledge the agency's comment.

***Labeling Deficiencies:***

**FDA Comment:**

**GENERAL COMMENTS**

Revise your labels and labeling to be in accordance with the most recently approved labels and labeling for the reference drug, Motrin IB (NDA 19-012/S-024; approved October 2, 2000, to be in conformance with the OTC Labeling Final Rule 21 CFR 201.66). (See attached copy)

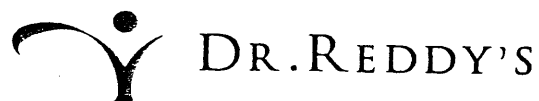
Please revise your labels and labeling, as instructed above, and submit in final print or draft if your prefer.

**Response:**

The labels and labeling have been revised as per the currently approved reference listed drug Motrin® IB, as recommended by the agency.

The revised labels and labeling including 12 final printed copies are provided in the following Exhibits:

Exhibit VII	-	Proposed Container Label	—	bottle) 24's count
(12 Final		Proposed Container Label	—	bottle) 50's count
printed		Proposed Container Label	—	bottle) 100's count
copies)		Proposed Container Label	—	bottle) 150's count
		Proposed Container Label	—	bottle) 200's count
		Proposed Container Label	—	bottle) 250's count
		Proposed Container Label	—	bottle) 500's count



::5::

- |                                               |   |                                                                                                                                                                                                                                                               |
|-----------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exhibit VIII                                  | - | Side by Side Comparison of Previously Submitted Container Label and Proposed Container Label<br>Package Sizes: 24's, 50's, 100's, 150's, 200's<br>250's and 500's count                                                                                       |
| Exhibit IX<br>(12 Final<br>printed<br>copies) | - | Proposed Carton Label 24's count<br>Proposed Carton Label 50's count<br>Proposed Carton Label 100's count<br>Proposed Carton Label 150's count<br>Proposed Carton Label 200's count<br>Proposed Carton Label 250's count<br>Proposed Carton Label 500's count |
| Exhibit X                                     | - | Side by Side Comparison of Previously Submitted Carton Label and Proposed Carton Label<br>Package Sizes: 24's, 50's, 100's, 150's, 200's<br>250's and 500's count                                                                                             |
| Exhibit XI                                    | - | Proposed Package Insert Label (PIL)                                                                                                                                                                                                                           |
| Exhibit XII                                   | - | Side by Side Comparison of Previously Submitted Package Insert Label and Proposed Package Insert Label                                                                                                                                                        |

Pursuant to 21 CFR 314.440(a)(4), a third copy of this application is enclosed. This is the required field copy and we certify that it is a true copy of the technical section as described in 21 CFR 314.50(d)(1).

Included in this submission is an extra copy of our cover letter. Kindly acknowledge by date stamping this letter upon receipt and forwarding this copy to us.

If you have any questions, please contact the undersigned or Mr. Paul V. Campanelli, (US Agent for Dr. Reddy's Laboratories Limited) Vice President – Formulation Business, Reddy – Cheminor Inc., at One Park Way, Upper Saddle River, NJ 07458, Phone No.: 201-760-2880, Fax no.: 201-760-0401.

Sincerely,

**Pravir Choubey**  
Manager – Regulatory Affairs  
Phone No.: 91-40-3043919  
Fax No.: 91-40-3045238

66 South Maple Avenue,  
Ridgewood, NJ 07450

Phone: 201-444-4424

Fax: 201-444-1456

FAXed to 301-594-1174

March 12, 2001

Office of Generic Drugs  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Document Control Room  
Metro Park North II  
7500 Standish Place, Room 150  
Rockville, MD 20855-2773

Reference: **ANDA # 76-117 Ibuprofen Tablets USP 200 and** —

**CORRESPONDENCE**

Dear Sir/ Madam:

Reddy-Cheminor Inc. US Agent for Dr. Reddy's Laboratories Limited, Bachepalli 502 325, INDIA, is submitting this communication at the request of the Office of Generic Drugs, Food and Drug Administration. Reference is made to the original submission.

**The Firm hereby withdraws without prejudice any and all references and information relating to the — strength. The subject of this application will be Ibuprofen Tablets USP 200 mg only.**

Pursuant to *Code of Federal Regulations* Title 21 §314.440 (a) (4), a third copy of this communication is being provided. This is the required field copy and we certify that it is a true copy of the technical section as described in *Code of Federal Regulations* Title 21 §314.50 (d) (1).

Please contact C. Jeanne Taborsky at (410) 309-3145 or Paul V. Campanelli, Vice President Formulations Business, Reddy-Cheminor, Inc. at (201) 444-4424 or by fax at (201) 444-1456, if you have any questions concerning this submission.

Sincerely yours,

*C. Jeanne Taborsky*

C. Jeanne Taborsky  
Regulatory Affairs Consultant



NEW CORRESP  
Withdrawal of — only!  
Only the 200mg should  
be reviewed!!  
151  
151  
16-MAR-2

ANDA 76-117

MAR 28

Reddy-Cheminor, Inc.  
U.S. Agent for Dr. Reddy's Laboratories Limited  
Attention: Paul V. Campanelli  
66 South Maple Avenue  
Ridgewood, NJ 07450  
|||||

Dear Sir:

We acknowledge the receipt of your abbreviated new drug application submitted pursuant to Section 505(j) of the Federal Food, Drug and Cosmetic Act.

Reference is made to the telephone conversation dated March 14, 2001 and your correspondence dated March 19, 2001.

NAME OF DRUG: Ibuprofen Tablets USP, 200 mg

DATE OF APPLICATION: February 14, 2001

DATE (RECEIVED) ACCEPTABLE FOR FILING: February 15, 2001

We will correspond with you further after we have had the opportunity to review the application.

Please identify any communications concerning this application with the ANDA number shown above.

Should you have questions concerning this application, contact:

Tim Ames  
Project Manager  
(301) 827-5848

Sincerely yours,

Wm Peter Rickman  
Acting Director  
Division of Labeling and Program Support  
Office of Generic Drugs  
Center for Drug Evaluation and Research

117  
ANDA 76-117

Reddy-Cheminor, Inc.  
U.S. Agent for Dr. Reddy's Laboratories Limited  
Attention: Paul V. Campanelli  
66 South Maple Avenue  
Ridgewood, NJ 07450  
|||||

MAR 26 2001

Dear Sir:

We acknowledge the receipt of your communication dated March 12, 2001, requesting withdrawal of your abbreviated new drug application for Ibuprofen Tablets USP, \_\_\_\_\_ only.

In compliance with your request the Ibuprofen Tablets USP, \_\_\_\_\_ mg, is regarded as withdrawn. This withdrawal does not prejudice any future filing of the application. You may request that the information in this application be considered in connection with any resubmission.

Sincerely yours,

*[Handwritten signature: Wm Peter Rickman]*

Wm Peter Rickman  
Acting Director  
Division of Labeling and Program Support  
Office of Generic Drugs  
Center for Drug Evaluation and Research

cc: ANDA 76-117  
Division File  
HFD-647/Chem Branch  
HFD-612/Bio PM  
HFD-92  
Field Copy  
HFD-610/R.West  
HFD-610/P.Rickman

Endorsements:

HFD-615/GDavis, Chief, DC  
HFD-615/SMiddleton, CSC  
Word File  
V:\FIRMSNZ\REDDY\LTRS&REV\76117WD.OTH  
F/T by

*[Handwritten initials: IS]*  
26-MAR-2001 date  
date 3/21/01

Withdrawal of the \_\_\_\_\_ ONLY!

REDDY-CHEMINOR, INC.



66 South Maple Avenue  
Ridgewood, New Jersey 07450  
Telephone (201) 444-4424  
Telefax (201) 444-1456

February 14, 2001

Office of Generic Drugs  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Document Control Room  
Metro Park North II  
7500 Standish Place, Room 150  
Rockville, MD 20855-2773

Reference : Ibuprofen Tablets, USP — and 200 mg  
Abbreviated New Drug Application

Dear Sir/ Madam:

Dr. Reddy's Laboratories Limited (Formerly Cheminor Drugs Limited) herewith submits an abbreviated new drug application (ANDA) for Ibuprofen Tablets, USP —, and 200 mg pursuant to Section 505 (j) of the Federal Food, Drug, and Cosmetic Act.

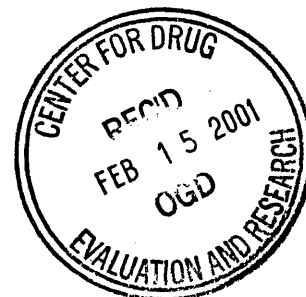
This ANDA refers to the listed drug, ——— NUPRIN® (Ibuprofen) Tablets 200 mg which is manufactured by McNEIL / Bristol-Myers the holder of the approved application and which is listed in the Approved Drug Products with Therapeutic Equivalence Evaluations (commonly known as the Orange Book).

Ibuprofen Tablets, USP — and 200 mg have been developed and will be manufactured, tested and packaged by Dr. Reddy's Laboratories Limited (Formerly Cheminor Drugs Limited), Bachepally, Post Bag No.15, Kukatpally P.O., Hyderabad 500 072, INDIA manufacturing facility, in accordance with 21 CFR § 210 and 211.

The manufacturer of the drug substance used to produce the ANDA / Biobatch of this product is Dr. Reddy's Laboratories Limited - Bulk Drug Division (Formerly Cheminor Drugs Limited – Bulk Drug Division), Plot No. 9/A, Phase 3, I.D.A. Jeedimetla, Hyderabad – 500 055, INDIA DMF No —

The required bioavailability / bioequivalence studies were conducted on Ibuprofen Tablets, USP 200 mg and NUPRIN® (Ibuprofen) Tablets 200 mg by ———  
These studies indicate that Ibuprofen Tablets USP, 200 mg are bioequivalent to NUPRIN® (Ibuprofen) Tablets, 200 mg.

The *in vitro* dissolution profiles for Ibuprofen Tablets, USP — are comparable to those of ——— The formulations of Ibuprofen Tablets, USP — are dose proportional to Ibuprofen Tablets USP 200 mg. A waiver for the bioavailability/ bioequivalence study for the — is requested.



# REDDY-CHEMINOR, INC.

February 14, 2001

Food and Drug Administration  
Ibuprofen Tablets, USP — and 200 mg  
Abbreviated New Drug Application

Page 2

Ibuprofen Tablets, USP — and 200 mg are stable and a two year expiration dating is requested. The two year expiration dating for these products is supported by one, two and three months accelerated stability data ( $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$  /  $75\% \pm 5\%$  Relative Humidity) in the smallest and largest fill size of the container / closure system proposed for marketing. The stability studies were conducted under a stability protocol that is in conformance with the current FDA Stability guidelines.

The dosage form, route of administration, active ingredient, potency and labeling (except DESCRIPTION & HOW SUPPLIED) for Ibuprofen Tablets, USP — and 200 mg are same as those for — , and NUPRIN® (Ibuprofen) Tablets, 200 mg, respectively.

This ANDA is submitted in thirteen volumes :

Volume I	:	Section I through Section V
Volume II through Volume V	:	Section VI
Volume VI	:	Section VII through Section VIII
Volume VII	:	Section IX through Section XI
Volume VIII	:	Section XII
Volume IX	:	Section XIII through Section XV
Volume X	:	Section XV through Section XXII

Included in this submission is an extra copy of our cover letter. Please acknowledge by date stamping this letter upon receipt and forwarding this copy to us in the self addressed stamped envelope provided for your convenience.



# REDDY-CHEMINOR, INC.

February 14, 2001

Food and Drug Administration  
Ibuprofen Tablets, USP — and 200 mg  
Abbreviated New Drug Application

Page 3

Pursuant to 21 CFR 314.440 (a) (4), a third copy of this application is also enclosed. This is the required field copy and we certify that it is a true copy of the technical section as described in 21 CFR 314.50 (d) (1).


We also notify the agency that due to the recent merger of Cheminor Drugs Limited into Dr. Reddy's Laboratories Limited, our company name has been changed from Cheminor Drugs Limited —Pharma Division to Dr. Reddy's Laboratories Limited — Generics.

As far as this ANDA is concerned, as most of the documents have been generated prior to the change of name, we have maintained the company name as Cheminor Drugs Limited — Pharma Division throughout this ANDA. However the labeling includes Dr. Reddy's Laboratories Limited as the name of the manufacturer.

We request the agency, to henceforth to consider our company name as Dr. Reddy's Laboratories Limited — Generics for correspondence purpose. All the addresses remains the same.

Should you have any questions or require additional information, please do not hesitate to contact the undersigned at (201)444-4424 or by fax at (201) 444-1456.

Sincerely,

  
Paul V. Campanelli  
Vice President, Formulations Business